

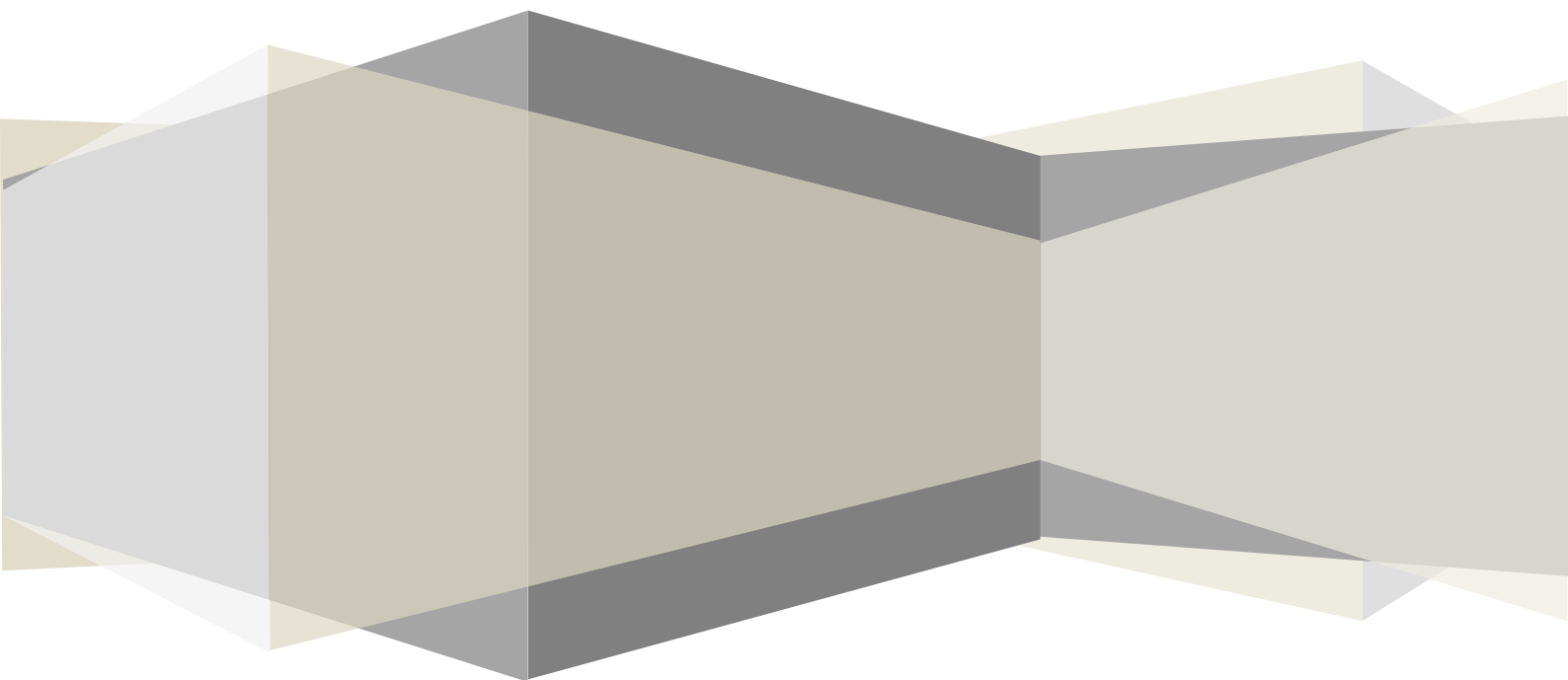
International Hellenic University

Museum Connection

Ways to connect the Museums of Thessaloniki in order to
enhance the visitors' experience

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Abstract (Executive Summary)

There is a significant lack of infrastructure when it comes to connecting cultural institutions of the same field in order to create an appealing experience to it's' visitors. Particularly the museum field is a good example in order to set in practice theories from the areas of space syntax, cognitive studies and technological facilities in order to settle this gap and create an interesting journey through the different types of museums. This paper deals with means of interconnection of the museums of the city of Thessaloniki and discusses ways to enhance the results of this area and communicate it with more museum visitors. It is argued that the best ways in this direction is to use technological facilities and interaction processes, in order to accomplish a better engagement of the visitor.

Keywords: Experience; Visitor Engagement; Connection of Cultural Institutions; Museum Visitor Motivation; Museum Connection

Chapter 1- Introduction and Project Description

The museum as a cultural institution is an alternative source of education, interaction and enjoyment to the visitor. As a space it is commonly a large public building with separated spaces where the collections are exhibited, while the crucial part is the visitors' journey through these collections.

Museums are a great opportunity to inform and educate tourists about the cultural, historical and innovative practices of a place they visit, while at the same time they are a special place for inhabitants of a city and a great educational source for children and young adults.

The idea of the museum evolved over the years and is inspired and influenced by new practices and technological advantages; hence there are different types of museums both in terms of collection input and in terms of exhibition styles.

As it is clear, a very important fact to every museum is to communicate the permanent and not permanent collections to the public and the visitors by creating a special visitor experience within the building and the collections represented. At this point the visitor derives satisfaction by exploring the collections of his interest and by collecting relevant information.

A very interesting part of the procedure outlined above, is the next moves and thoughts of the visitor by the end of his visit in the museum. Apart from exploring the exhibitions of a particular museum or the plans he has for a further visit in the future, it goes without saying that there is a lot of information he could derive by being inspired to continue this process and to visit another museum of the city. Whether from a relative type of exhibited items or from a completely different type it is a fact that it will act as a unique experience. So, a way to provide the visitor with a more appealing and thorough experience is to try to connect the various museum types of a city and in this way enhance the visitors' perspective.

The cognitive influence of the visitor's navigation through the museums of a city has the goal of enhancing the visitors experience by making it more impressive, proposing new intriguing information and exploring and connecting interesting parts

of one topic. It is a unique way to propound one of the initial uses of the museum, which is to educate its' visitors.

In this particular case, Thessaloniki, the city that has been chosen to conduct this interconnection, has an average quantity of cultural institutions and therefore covers all the types of museums. At the same time this fact leads to a better examination of the project as a smaller scale is used and this makes the opportunity to handle it more appropriate in order to conduct integrated research and draw suitable solutions.

Chapter 2- Background Review

Theoretical Background and Problem Description

In order to focus on the initial thought of building an interaction network between the various museums of the city of Thessaloniki, which will act as a trigger for the visitor to wander through there have been studied methods of space syntax, cognitive ergonomics and user experience practices and there have also been examined relevant connection cases.

In this stage it is essential to conduct a background analysis in order to make familiar the tools that were considered and to give an insight into previous research. This theoretical framework is also used at the analysis stage, in order to understand the results that emerged and use them in the most proper manner.

To begin with, Space Syntax is a theory of space that has been analyzing the spatial layout of the surrounding environment with the help of analytical, quantitative and descriptive tools and computer technology (Hillier & Hanson 1984; Hillier 1996 in Hillier and Tzortzi 2006).

As far as the Space Syntax studies are concerned, a brief description of the method could not leave without saying the focus of the theories and techniques of it on the relationship between the social logic and the space interpretation in the structures of inhabited space of all forms and scales, i.e. buildings, building complexes, cities or even landscapes (Bafna, 2003). This makes Space Syntax a

precious tool in order to analyze configured space not only from an architectural point of view, but include also other social, economic and environmental aspects.

This particular method aims to establish techniques that will consider the social logic inside constructed and populated parts of a wider space complex. Moreover, the two basic ideas that work at this method can be summed up in exhibits placement within the space and the relation created between two or more spaces (Hillier and Tzortzi, 2006). Likewise, by using Space Syntax, an opportunity occurs to study the visitors' movement within the wider borders of urban environment and configure the aspects of control of this movement between two separated spatial structures.

The main concern of this study is the co-relation and collaboration of several spatial environments with the purpose of leading the visitor in an experiential journey through the museum buildings with the purpose of enabling him to connect with different museum collections. Regarding this opinion, Space Syntax Analysis accepts that metric distance is inessential as far as the connection of two spaces is concerned, yet as their connection is set in the confines of a larger system (Wineman and Peponis, 2010).

Particularly in the case of urban layouts, which mainly concern this research, the application of Space Syntax aims to produce quantitative standards of the spatial characteristics and deals with the concept of connecting smaller units of a system in terms of growing relationships between the spatial units or the spatial system (Wineman and Peponis, 2010). Besides, the visitors of museums tend also to have a relation to the building they are visiting, while through this visit it is suggested that this relation could embrace an ensemble of museums of the wider urban area.

Besides the fact that there is a wide range of variables that influence the movement flows, as it appears, environmental conditions can also clearly imply the movement of visitors (Penn, 2001). Notably, environmental stimuli can be used aiming to guide museum visitors through different types of museums that they would not have visited otherwise. Briefly, the variables that have to be taken into account range from attractors to visibility issues and vary from horizontal to vertical level of direction.

Visibility and accessibility, in particular, are the main guides that influence the visitors' movement and behavioral choices rather than the metric distance or the characteristics of the elements being presented. In this field, the results of general observations on mental mapping and exploratory behavior seem to match with the exploration ways visitors use in museums. Studies have showed that museum visitors tend to stop in spaces where there is a remarkable visual connection to other spaces of the building complex. In addition to that, visual encounter creates a form of identity which is a way to create awareness of the visitors. (Wineman and Peponis, 2010)

In order to understand and define behavioral alternation, the terms of contact and engagement are used. A contact occurs when a visitor walks past an individual exhibit in a museum while engagement occurs when a visitor stops at the feature. Research has proven that through cross-visibility a more active engagement of visitors to the exhibits, was developed, which is actually a desirable result (Wineman and Peponis, 2010). As far as this study is concerned, the main aim is to create engagement between the visitors and the exhibited elements of an institution and contacts between visitors and other institutions.

It goes without saying that apart from the visibility issues that have already been mentioned, a very important aspect and a crucial point of Space Syntax theory is the interpretation on the one hand of the outline objects create within the predefined limits of a space and on the other hand the outline of the relations between spaces. In terms of spatial studies these tend to be the main elements of shaping the experience the visitor receives, which in this case is his visit to the museum (Hillier and Tzortzi, 2006).

Apart from the spatial facts that have to be taken under consideration and that have been analyzed so far, very important pieces of the concept are the facts that make the visitor part of an experience as well as the facts connected with the cognitive studies side of this area.

The objective of museum institutions and exhibition environments is foremost to design appealing experiences to the visitors, while a positive outcome is definitely the further visit of the participants. This can also be applied by sending the

visitors of one museum to another museum with the intention to interact with related environments and participate in a different experience and by this way enhance the overall experience.

To create this appealing experience outlined above, various elements have to be considered from pre- to post- visit components, while the result of it leads to feelings connected with emotion, intellectuality, spirituality or physicality (Shaw & Evens in Sheng & Chen, 2011). Personal and social interpretations from the past of people visiting museums have a strong influence as well to this dynamic process.

In this way, in order to create a special experience to the visitors, it will have to be taken under consideration the past visits to any institution, the current visit and the insight into the future visits as well. Similarly, this platform will work on cross-visiting and connecting institutions to each other.

An important fact that has to be mentioned is the current notion of perceiving the museum visit not only as an educational purpose but also as an experience that includes a variety of activities that match to the museum environment (Kesner, 2006). Nowadays, the museums, by using a wide range of activities keep their visitors fascinated and by having a positive impact to the museum visits, more activities are being organized.

Keeping in mind the diversity of the visitors of a museum , as well as the diversity of the visitors between different types of museums , it is clear that this experiences offered differ in each case and are infused and structured for the needs of every case (Prior in Kesner,2006). A good start in order to bridge the gap of this diversity between different museum visitors is to try and find mutual points.

As Ladislav Kesner points out, there has been noticed a difference between the offered experiences during museum visits and the perception of this experiences from the different types of visitors, which is a major concern among museum professionals. A key to success on this is of course the considerate use of experience design within the museum environment, as the creation of experiences is one of the main facts a museum is concerned.

The four main areas characterized as a satisfying experience, within the environment of a museum, can be indicated as object experiences, cognitive experiences, introspective experiences and social experiences (Doering, 1999; Pekarik, Doering & Karns, 1999 in Kesner, 2006). These areas can help to build suitable experiences that will work as a connector of the variety of museums in Thessaloniki.

Additionally, another interesting aspect is the use of the new media and technologies in the process of enhancing the experiences of the visitors around museum institutions. A point that L.Kesner (2006) questions in his journal is whether the users have altered their perceptions and in which extend through the use of new media and visual technologies and how these technologies can be used to create a better and educational experience to their users in a museum visit in order to conclude that the most important fact of new media in the part of interaction with the user is the continuous reaction that stems from user recognition and user identification by using intuitional mechanisms. By the introduction and the active presence of technological means and applications in the institutional spaces, there has been given space in order to work on the interaction area between visitor, exhibits and spaces.

There are plenty of ways to use technology and incorporate it in a museum exhibition environment, to name a few, to support several tasks or assist through the exhibition paths. Whether serving as a tool or as a medium, technology has the power to engage people to an action or activity while at the same time through its use; messages can be used and expressed wider (Norros, 2013). Technology is a great tool for interaction and can be incorporated in a creative way in order to satisfy the visitors' needs. In addition to that, technological applications can serve as an alternative way of education.

From the designers' point of view, a very useful tool for designers in order to influence or motivate a specific user behavior is the Design with Intent (Dwl) method whereas the three main principles of this method can be presented briefly by applying intentionally design techniques that have an impact in user behavior in an unintentional level, the environments that are used for this method are systems with

the suggested techniques been used in multiple cases and the last principle concerns the possibility to apply these techniques from one field to another, regardless of the difference between them (Lockton et al., 2009). This is a significant way to draw inspiration or use the outcomes of similar cases in order to conclude to more suitable solutions.

As it has been mentioned, this tool is supplementary to already existing design methods, while its goal is to suggest techniques that have an impact at users' behaviors. The structure of this method consists of two 'modes' : The *inspiration* , where target user behaviors and patterns are grouped into six categories (Architectural, Error- proofing, Persuasive, Visual, Cognitive and Security) and the *prescription*, where the designer suggests a range of target behaviors with a subset of the most suitable design solutions indicated with examples (Lockton et al., 2009). With the help of this supporting material there can be pointed out and presented results complementary to the user's needs.

The consideration of the theoretical literature review gave an important insight into contemporary practices of the field. The space syntax practices together with the cognitive and technological tools have to be taken under consideration in the further stages of this research.

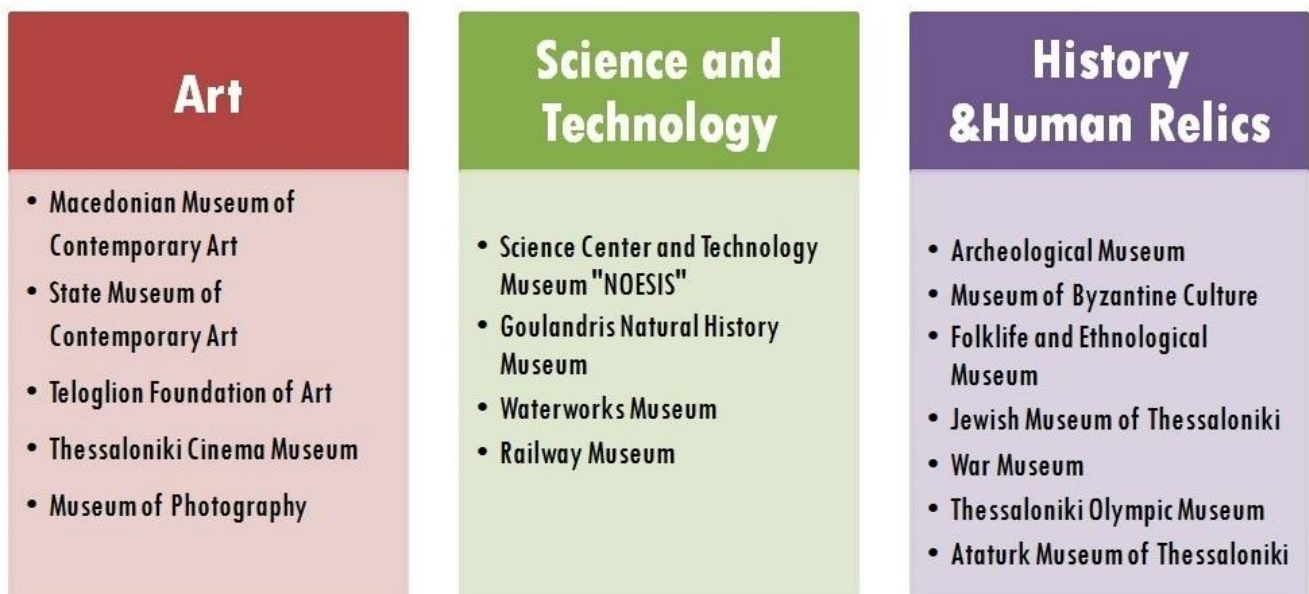
Local Area Characteristics

The city selected for conducting the research and applying the findings derived from this study is Thessaloniki. A brief presentation of the city will support the general context. Thessaloniki is the second biggest city of Greece and is located in the northern part of the country. It has nearly 1 million inhabitants and is a place with great history, therefore a great amount of historical spots and museums. Apart from the connections with the past, Thessaloniki has also a considerable contemporary culture and many connections to contemporary art.

In addition to the geographical and cultural information about Thessaloniki, there also has to be mentioned the great tourism prospects of the city. As stated by the Greek Tourism Confederation in the facts and figures given for Greek tourism, the tourists coming from international destinations reaching the airport of

Thessaloniki amount to 1, 3 million approximately, solely for the year 2012. Having said that, by connecting the museums of the city, and propose an alternative journey for the visitor from the one building to the other, there is risen a great opportunity for the institutions to grow the number of their visitors.

As far as the part of the museums is concerned, there are nearly 20 museums in the city, while in this study there are made suggestions for 16 of them considering their size is bigger than this of a private collection. These museums can be divided in three categories as stated by Burcow (1997) in C.-W.Sheng; M.-C. Chen (2011) the art museums, human historical museums and science and technology museums. This categorization is also represented graphically in the figure below in order to have a better insight into the case.

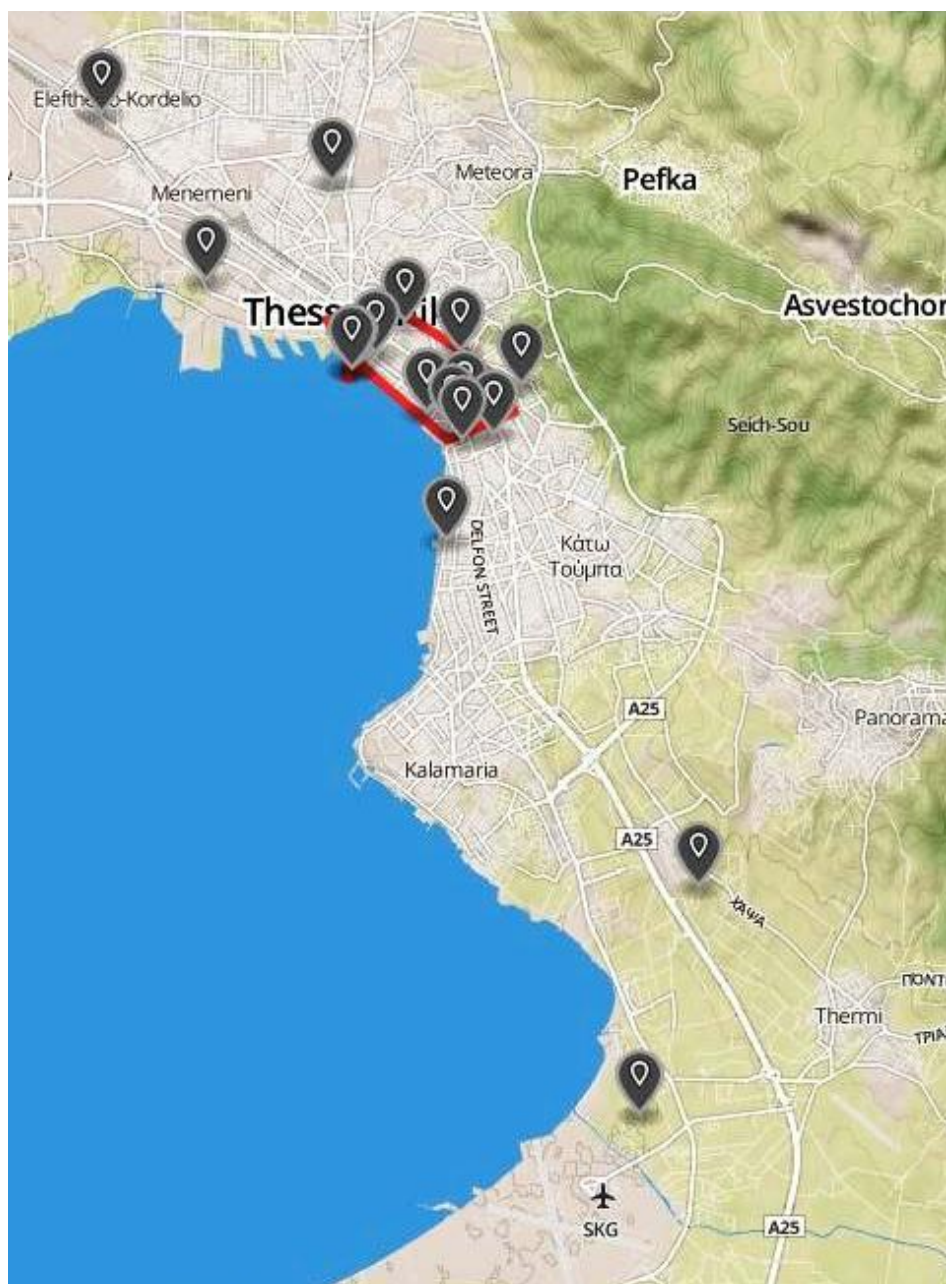


Appendix 1. Museums of Thessaloniki categorized.

During the summer of 2010, the movement of the 5 Museums was launched, with the participation of 5 of the biggest museums of the city. This movement included the Archeological Museum, the Museum of Byzantine Culture, the Macedonian Museum of Contemporary Art, the State Museum of Contemporary Art and Teloglion Foundation of Art. This was a notable connection of 5 big institutions

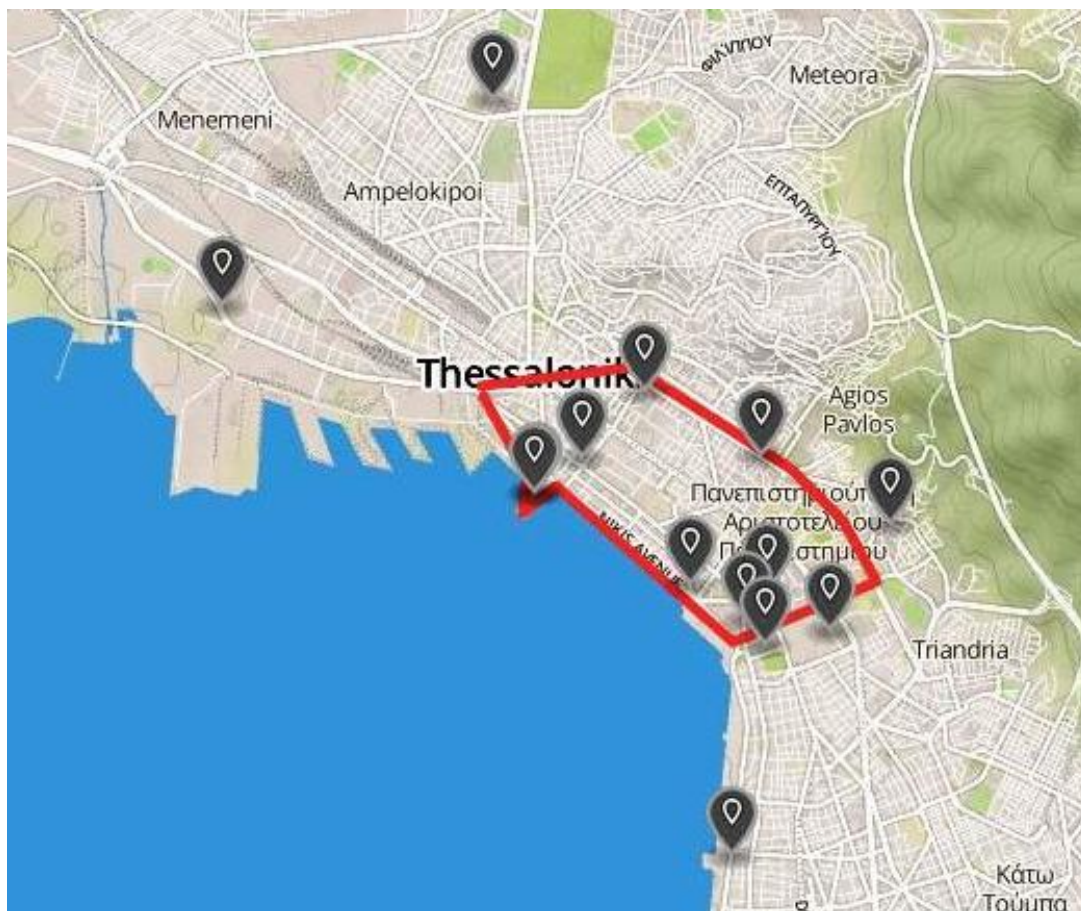
in general and it was based on the mutual organization of big cultural events, like the Biennale, as well as associated exhibitions and exhibition exchanges.

In order to strengthen the connection an internet site was created by the participating museums, where all the actions were uploaded and the visitor could be informed timely. It had a very dynamic impact to the cultural events of the city at the beginning but unfortunately, it has a lower profile recently, due to lack of resources, although it continues existing.



Appendix 2. General map of Thessaloniki

As depicted in the map of the city, the vast majority of the museums are within walking distance. Additionally they are located centrally in most cases or in a very close distance to the centre. With the only exception of two museums that are located in the suburbs of the city. In the pictures the centre of the city is enclosed in a red line, so what stated above is made clear visually.



Appendix 3. City Centre of Thessaloniki

Mind Map

The core of this project can be divided into two very important parts, that have to be combined in order to give an answer on how the visitor of a museum can be motivated and as a result visit another museum. One part that was considered is the connection between the museums and in what means it is possible, while the other part is the motivation of the visitor and the way it is made possible.

In this sub-chapter there will be discussed the most important aspects taken under consideration as far as the connection of the museums and the motivation of the visitor are concerned. For this project, apart from the review of existing theory on the field and the outcomes of the research, these are the additional conditions that were implied, in order to obtain an effective result.

Relevant topics that are connected to the main area of research are administrative and financial issues. They are important aspects of the final outcome of the project and they are mentioned as facts that affect the final result, without being considered the primary issues of this study, as more practical means of connectivity are discussed in this assignment.

It goes without saying that facts like the infrastructure, the financial issues, the human resources, the space availability and the central administration should be solved before preceding any step further. Bearing the fact that the whole project could act as a pilot concept in a research level, a very interesting solution in the cases outlined above would be to involve university research programs, which would have opportunities of funding resources.

A good cooperation between the institutions is a fact that is desirable and notable, while at the same time it will help the effort to evolve and it will be a positive fact to motivate the visitors of the museums. This also applies to the previous category.

The most important fact though, is the strategic thinking, which should be applied in the organizing and the implementation of the final exhibits and exhibitions of museums that can be connected. A thorough research through the exhibitions and exhibits of each participating museum would be the case, to conclude to the most effective final connection scenario.

Another important fact for this connection to be realized is the motivating incentive for the museums to participate in this project. It is argued, that by setting a connection between museums and inspiring visitors to walk through this path across the cultural institutions, there will be an exchange among people who visit specific

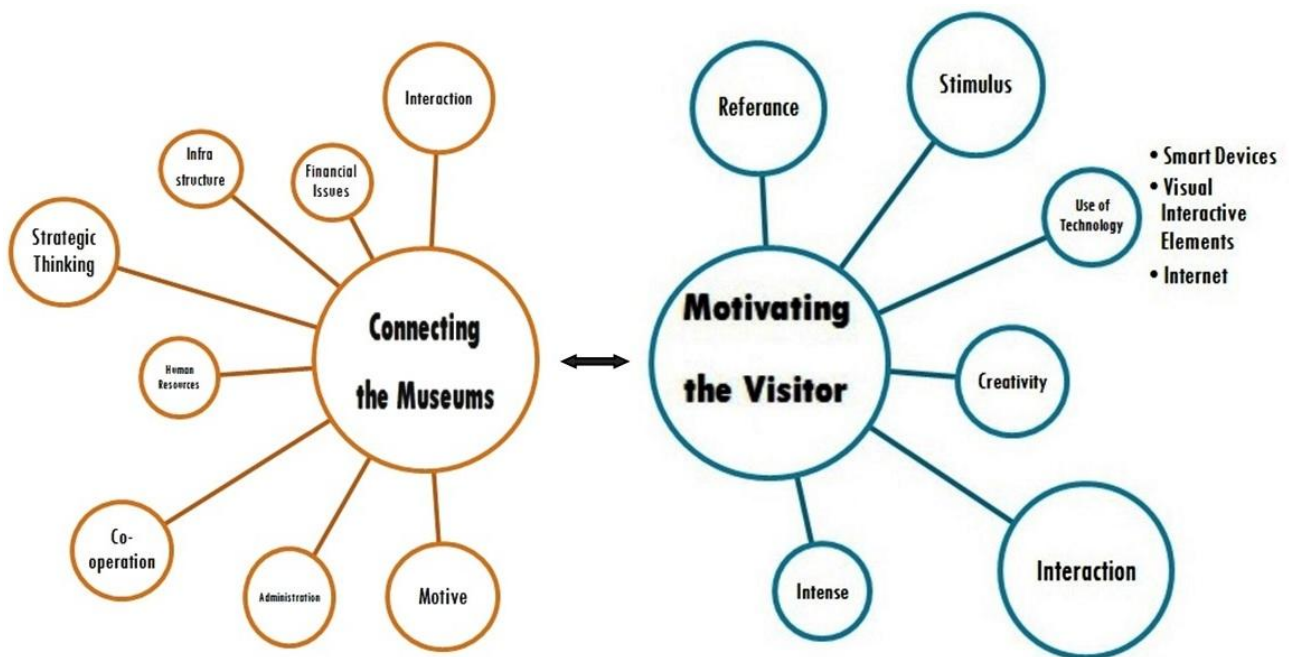
museum types and there could be a rise in each museums visitor's amount and in future visitors' engagement.

To continue to the facts that are important to motivate the visitor, a fact that will be the link between connecting the museums and motivating the visitor to choose an alternative route and wander from the one museum to the other is the interaction between the museums and between the visitor and the museum. This was considered as the trigger that will lead to a successful and sustainable solution of the main perspective.

Equally important consideration was given to the stimulus the visitors accept while entering the museum or while touring on the exhibition areas. This is a very strong part of the visitors' motivation, as it has a direct influence on the visitors' activities and decision making as far as the continuous pattern of the journey is concerned.

It is believed that there should also be made a reference from the depicted object or exhibition part or even exhibition in order to give to the visitor a link and an insight into the connection that is stated. This reference is possible to be made visually, which will give the visitor the opportunity to connect both parts of the system and unfold a curiosity in the means of growing the feeling to visit the suggested place in order to have a greater insight into this subject and to complete the experience.

Naturally, the use of technology is nowadays as much as important as everything mentioned above. Through the use of new means and new media technology it can be outlined in visual means of connection, the use of the internet or the involvement of smart devices and their applications. Technology can be a great tool for stimulating and engaging the visitor and the user of this field and is additionally a widespread tool with a great number of possibilities and uses. There should be taken under consideration the creative use and interpretation of technological means in order not to lower the standards of the medium and to keep the visitors satisfied and excited.



Appendix 4. The Mind Map

Chapter 3- Research Methodology

At this point a review of the research method and design appropriateness will be presented, as well as details of the objective and a discussion of the sample of the participants that took part in the main research part. In addition there will be presented the way the data have been collected and analyzed.

Research objective and Research question

The purpose of the project is to propose solutions of successful interaction and collaboration between museum institutions of the city of choice with the intention to enrich the visitors' experience and create their positive response.

The main aim was to find the best ways in order to introduce through the lens of one museum the rest of the city's museums and guide the visitor through this unique journey throughout the past, the present and the future, different types of

institutions and interesting exploration paths. Mainly design solutions are worked on and presented in order to fulfill the very first intention of the research. It is important to understand in what extent the ideas could be implied and realized from the institutions, in what extent they are functional, in what extent they are acceptable from the audience and in what extent they fulfill the improvement of the visitors' experience.

The research concerned the museums of the city of Thessaloniki, as it is an average city with a reasonable number of museums. Moreover the museums cover all the types and categories and there are equal bigger and smaller cases.

Particularly there have been recorded 20 museums in total in the city, while this research is dealing with the 16 of them as an example that can be including the rest of the city's museums or can be implied in similar cases of museums. Moreover, as already mentioned, another categorization that concerns the types of these museums has been made after Burcaw (1997) in C.-W.Sheng; M.-C. Chen (2011) and concludes that the museum types are three. The first type includes the museums that are dealing with artistic works, the second with the museums that deal with human historical relics and the third type deals with science and technology museums. The city of Thessaloniki includes all three types of museums and furthermore the 16 institutions that have been chosen to work as an example in this research cover the three museum types mentioned above.

After completing the research and drawing the conclusions the question 'How can a museum visitor be informed and motivated to continue the journey through the museums of a city' is answered.

Research Strategy

In order to collect the appropriate essential information that concerns this particular subject, the qualitative data collection technique was used. Particularly interviews were conducted with the intention to collect information about the current situation and the current collaborations between the museums, about the

general structure this institutions operate, about how far collaboration cross the institutions is plausible and in order to elicit possible proposals on the subject.

The objective of choosing this method, among others, was the notion to understand the particular situation, the experiences and the attitudes towards it and collect words rather than numbers. There were certain questions that had to be answered by certain people within the museum context.

The decision of conducting interviews helped to assemble accurate and reliable data that were related to the research question and the main research objectives. On means of the formality and the structure of the interviews there have been conducted semi-structured interviews, where there was a particular list of themes and questions that needed to be covered, while the order of the questions varied in each interview depended on the flow of the conversation, as well as the number of the questions was adjusted in each institutions context and activities. The main aim in all interviews was to extract answers and cover all the themes of question in order to explore the research question and satisfy the research objective.

The themes and the questions that were essential to cover derived from the literature research, similar cases and common sense and have been divided into 2 groups, with a total of 9 questions.

The first part of the informal qualitative questionnaire consisted of 6 open ended questions that concerned general topics relevant to the research objective, like the incentives used or not used in order to induce or stimulate the museums visitors to continue their tour to another museum, the relationship between museums, their visitors and new technologies or the main areas where a connection between the museums could be used.

The second part, with 3 open-ended questions, concerned the already existing collaborative practice of 5 of the biggest museums of the city and comments or opinions on this particular subject. Both, museums that participated or not were asked about this, because it was the most profound and the latest motion to the collaboration between institutions and regarded the whole museum community.

There were conducted 5 interviews with administrative people of the Archeological Museum of Thessaloniki, the Museum of Byzantine Culture, the Folk-Life and Ethnological Museum of Macedonia- Thrace, the Science Centre and Technology Museum (NOESIS) and the Macedonian Museum of Contemporary Art. The participants were selected because of their relevance to the research topic and their personal involvement in similar cases discussed or realized in the past or prepared for the future. The interviews were conducted in one-to-one sessions in the working environment of the participants and the process has been audio-recorded, with the approval of each interviewee, while additional notes were taken during the interview.

Analysis

In order to be able to answer and prepare a proper designed proposal regarding the research topic, after reviewing the proper literature, deciding on the right research design and collecting the right data, this is the point where the important analysis of the collected data will take place.

The data that had been collected by this point, as mentioned above, through audio-recording and note taking have been subsequently transcribed. Through this process certain themes and patterns emerged, where the data had been categorized according to the theoretical framework and unified in proper categories in order to continue the analyzing process properly. Moreover existing theory and more specifically the theory used up to this point was used to shape the analysis procedure and define the final results.

In addition to the part of qualitative analysis, related cases from similar or relevant fields were investigated and presented. Important, useful and inspiring material has been derived about how other cases or solutions have worked.

Chapter 4- Results

Qualitative Research Results

In this chapter the results of the data analysis of the interviews are presented. The data were collected and analyzed under the views of space syntax, cognitive theories and user tactics as mentioned in the literature review and were categorized in present tactics, pre-conditions and new prospect proposals.

There were conducted 5 interviews in order to collect this data. These interviews were conducted with administrative people of the selected institutions. It was considered to have samples from different museum categories, as well as the terms of the largeness of the institution, the subject of their collections and their participation in the already existing movement of the 5 Museums.

There have been conducted interviews with 3 men and 2 women, who were heads of the sectors of exhibitions, public relations and communication or administration of the participating museums. Moreover the 3 out of 5 museums were already part of the 5M-movement, the fourth was a smaller museum in terms of collection space and the fifth was away in terms of metric distance.

	Interviews with Museum Administratives				
Institutions	5				
Local Area	Thessaloniki				
Demographics	Interviewees				
	1	2	3	4	5
Gender	Female	Male	Male	Female	Male
Museum	Macedonian Museum of Contemporary Art	Science Centre and Technology Museum (NOESIS)	Folklife and Ethnological Museum Macedonia-	Museum of Byzantine Culture	Archeological Museum of Thessaloniki
Museum Type	Artistic work	Science and Technology	Human and Historical Relics	Human and Historical Relics	Human and Historical Relics
Institution Size	Big	Big	Small	Big	Big
Participating in 5M	Yes	No	No	Yes	Yes

Appendix 5. General information of Interviewees

After the completion of the interviews and the categorization of the results there were data collected for both, current collaboration efforts as well as material for prospect collaboration proposals.

As far as the current situation is concerned the movement of 5M was discussed with the 5 interviewees, regardless if the museums were in or out of this movement, and the conclusions of this part led to the results that the main facts of this collaboration of the 5 museums was apart from coincidence, the fact that they are the biggest museums of the city in institutional and spatial terms, their mutual infrastructures and their local proximity, as 4 out of the 5 museums are in the same regional axis.

As far as the collaboration of the museums is concerned, the means of connection that are currently in practice are, as mentioned the 5M movement, mutual events (i.e. sleepover, yummy museums, book festival, full moon events, music events) and actions (i.e. biennale, photo-biennale etc.), lending of objects between the museums, banners and posters and a recent limited edition released museum map of the city of Thessaloniki.

In the environment of the museum, there are also the wall texts that create the curiosity of what comes next historically or how is a fact connected with a different point of art or in terms of the conducted tour through the museum, where there is given verbally the information of continuing the tour in an relevant space.

In addition to what already has been said, there is a mutual ticket and a mutual leaflet that concerned the collaboration of the Archeological and the Byzantine museum and there is also an Open Day conducted every September at NOESIS, where other museums are showcasing their work.

As far as the part of the prosper connection between museum institutions is concerned the analysis of the interview material concluded in 5 main areas, namely proposals of interconnection of the museums, spatial specification of the museum area where connection practices can emerge, the conditions of a successful connection associated with the bodies that should ideally be concerned and last but not least the technological part in this connection.

The necessary characteristics of the proposed solutions should include creativity, stimulus, a trigger and an intense element in order to create an impression to the visitor. A reference through the existing displayed material could also be used in order to encourage the activities to this direction.

Not few are the connection possibilities that could be developed based on existing structures. The educational programs, the verbal contact during the tour of a museum, a mutual ticket or a daily ticket, and a map of the museums are facts that partly exist in some of the city's museums.

Additionally, new elements were proposed in order to drive the visitor to this direction and help him visit more museums. The first element is an info point, that will use technology as well as classic ways and that according to the interviewees should differentiate from existing touch screens and info kiosks, in order to avoid user's monotony and to establish their interest. An additional field that emerged through the interviews was the need of museum applications that will be used in smart phones and smart- devices and will work on the direction of joining the museums.

There was also discussed the spatial limits of this interconnection of the museums, where the participants who were interviewed proposed to use the public areas of the museum, the entrance, the cash register area and as well as the cafe-restaurant or the museum shop.

There was a negative input from the majority of the interviewees concerning the use of exhibition areas and objects in order to connect the one museum to another. There was addressed the concern of confusing the visitors of the museums if not used responsibly and with a strategic understanding and planning.

The conditions that have arise through this process can be summed up first of all in securing of prosper financial resources in order to have the convenience to proceed further. In addition to that, adequate human resources and space should be established, as well as the positive cooperation of participating cultural organizations. Important facts that have been highlighted are the following; the catering of the interconnection and the moves, the coordination and the central

management of this attempt and the infrastructure for the proposed actions will help to the positive outcome of this attempt. As very important fact, that has been highlighted from the majority of the interviewees, is the motivation of the museums to participate to this effort.

There was an instant involvement of the bodies that should participate in this collaboration and connection of the museums and there were mentioned the municipality, the institutions themselves, the ministry and the friends of the museums as proper bodies that should and could be included in the project to help substantial. This leads to the need of central organization, as many times the interviewees complained about lack of support in distinctive ideas.

Another part that has been acknowledged is the support technology and technological means have to offer. Nowadays, there is already a site of the 5M, there is a significant number of visitors (followers/fans) in the social media part and there is also an application for the archeological museum that appears as a successful attempt and is widely common.

The parts that can be considered and could help this project to develop are the internet, mainly through social media or through the main site of the municipality of the city, which will work on this way. A very important fact, according to most interviewees is to have adequate people to work on this part of the suggested project and keep it updated. Another part technology can be necessary is the further development of applications or even the use of mobile tags and QR codes. This could act, as it has been assumed, as information point for the visitor, while touring the exhibition or as a guide for the visitor every time he approaches the museums.

Similar cases investigation

In order to have a greater insight into the situation of museum connections it was essential to study similar examples. At this point as it was mentioned in the literature review section there have been taken under consideration additional examples from relevant fields, in order to cover all aspects of this particular subject.

After an extensive research in similar approaches and ideas about connecting two or more institutions, there appeared some very interesting yet suitable and inspiring cases. The variety of the cases expanded from mobile applications for social use to linking neighborhood venues with visual elements.

The most important cases to mention were HintMe, a shared mobile platform, connecting visitors of the museums of Denmark with the museums and social media, the museum island (Museuminsel), the structures of several state museums in the city of Berlin in Germany, the Museum 2020 an initiative of the British Museums Association, a plan about the future of museums and the 'Quartie des Spectacles' the visual identity connecting the neighborhood with the majority of theatre shows in Montreal, Canada. Below, there is a detailed presentation of the mentioned examples.

Lately there is an involvement of museums and cultural institutions with social media. Due to the use of social platforms the institutions aim for a better engagement and a greater involvement of the visitors. The project that is selected to be presented in this study as a relevant field is the hintme.dk platform that concerns the Danish museums.

In order to launch a close collaboration and explore the benefits and results of opening up their collections in the online use, 11 Danish art museums have joined their forces and are working on a pilot program.

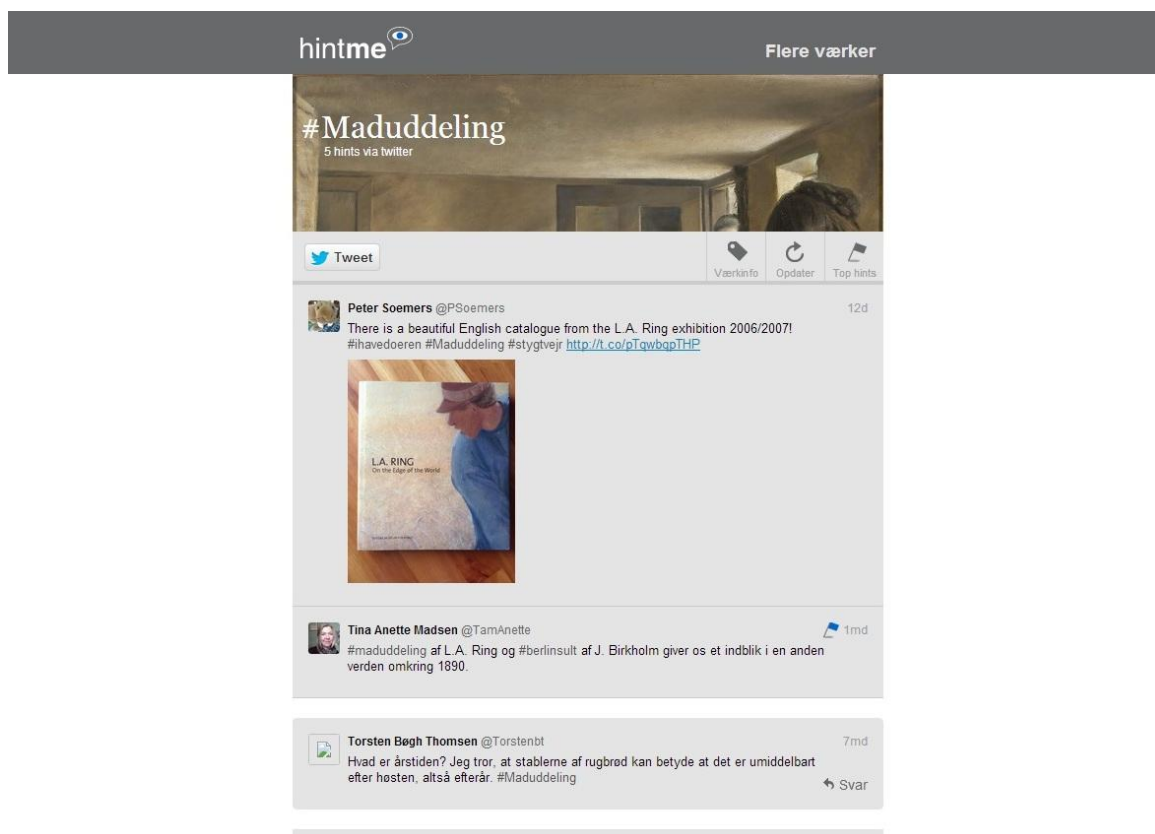
HintMe is a shared mobile museum platform that connects the participating museums while the significant aspect is that it is based on an already existing platform, Twitter. This choice was made due to the easiness, the manageability and the fact that it is a common social media platform with a wide range of users. HintMe has the objective to engage museum visitors and users of this application to active involvement with the collections, to interpret art and additionally to promote the dialogue between the visitors-users about art. Comments from previous visitors are shared and are informing everyone about the artwork they are looking. There is also the use of twitter hashtags which makes the platform more accessible to the wider internet community.



Appendix 6. Opening site of HintMe

HintMe is used to enhance the user experience through the museum visit and also create a stronger engagement of the visitors with the museum, the collections and the online media content as well as with other visitors-users. This platform is based on three basic principles that were defined by the museums team. The 3 main guidelines the project follows are the share and reuse of the domain content on an free basis, the use of an existing platform and the participation of the user in the development of the experience itself.

The challenge of this deed was the motivation of using mobile devices as a tour guide through the museums and the impact that this will have in the visit of a museum institution. As it started on a pilot basis, the results of this collaboration are still vague, although further study is done in the direction of combining the online content platform with an audio tour guide in order to increase the users' participation of the process itself as well as the interaction between the user, the online stimuli and the live artwork. The project works with the help of QR codes for smart-phones and the participating museums have adopted creative commons license for their art collections.



Appendix 7. Content of HintMe

Not few projects are related to this approach and are using and growing through popular online platforms like twitter, google+, pinterest etc. Unfortunately due to length limitation of this study it is extremely impossible to mention and analyze them all.

The next case that can be related to this particular project is the famous Museum Island in Berlin, consisting of an ensemble of 5 Museums builded on an island in the river Spree from 1830 to 1930, which currently are the heart of Berlins Museums.

The buildings of the Old Museum, the New Museum, the Old National Gallery , the Bode-Museum and the Pergamonmuseum have a great architectural history and are a piece of cultural heritage according to UNESCO and attract many visitors every year, which led in 1999 to the decision of proposing and registering the Museum Island Masterplan. Besides the renovation and restoration of the buildings and the collections of the Ensemble, there was additionally taken care of building new essential venues integrated in the architectural combination and the gardens of

the Ensemble will also be reconstructed. The fact that is relevant to the current study is the concern of building an Archeological Promenade that will connect the museums not only in terms of space but also in terms of the collections presented in the museums.

The great Archeological Promenade will connect 4 of the 5 Museum buildings through a visitor's way that will include the 4 museums. In this promenade, besides the facility that the visitors have to walk from one museum to the other spatially, there will also be a presentation of each museum individually. More precisely, the rooms will present briefly the character and the collections of each museum, giving a short insight into the most important and famous exhibits of each museum. At the same time thematic exhibitions will also be presented in order to give a feeling of connectivity between the museums of the island. There is also planned to have rooms with not complex presentations that will be used as cross-passages, in order to give the visitor the opportunity to absorb the complex information stated in the rest of the Promenade rooms.



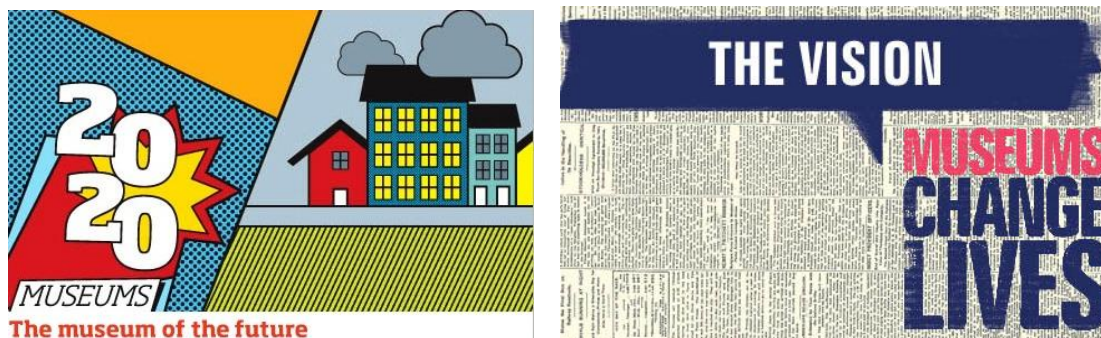
Appendix 8. Promenade in Museum Island

To go further the third example concerning the connection between the museums is the British 'museum 2020' project, directed by the Museums Association. The Museums Association of Britain consists of individual, institutional and corporate members and aims to protect the interests of museums and galleries.

This project is oriented in the changes and the new applications in order to build effective and more social oriented museums in the near future.

The 'Museum 2020' is a consultation about the impact of the museums and their future possibilities in terms of affecting individuals, communities, the society or environment. The relevant paper discussing the impact, the implications and the implementation of this project was published in 2012, while simultaneously there was a call to individuals to share their own views and comment on the paper in order to enhance the project. Another active action were the workshops conducted in various venues of the UK during 2012.

This particular project might not have a direct connection to the museum connectivity, but it shows a great responsibility and collaboration of the museums of Britain in administrative level. The museum association has concerns and is interested in the common future of the museum institutions and in the benefits the visitors and the society will gain from this in a horizon of 5 to 10 years.



Appendix 8. Visual Communication of Museums2020

The final outcome of this project was the Museums Change Lives and it was launched in 2013. In this way the vision for a greater social impact, the principles and the associated actions were presented widely.

Another example of unifying a spatial combination is the Entertainment District of Montreal, Canada (Quartier Des Spectacles). This project concerned the visual identity of a pure cultural neighborhood in Montreal, where the vast majority of theatre shows and other cultural places are collected. The goal was to create a synergy between the various cultural venues and highlight the space.



Appendix 9. Map of Quartier Des Spectacles

The design team tried to give the neighborhood a visual language, while at the same time each venue had its own personality. In this way there was not achieved a visual similarity, but rather a coordination in the space. The main concept was light and the use of it on buildings and urban areas. And an important role played the red dots as a signage and way finding means.

Chapter 5- Discussion

Discussing the results

Having already the basis of museum collaboration with the Movement of 5M, there is reliable point to start from and launch pilot actions in order to achieve a wider connection of the museums of Thessaloniki. Beside the actions that aim to connect the institutions and already take place, like mutual events and actions, exhibitions, mutual ticket map of the museums and educational programs, which all should be kept and enriched in that direction if possible, a slightly bigger museum group should be launched. A considerable way to do that would be to keep the 5M and enroll a small number of museums of different type (smaller, distant) in order to

run this actions and connection projects as a pilot- research project and use the results to improve it and expand it when it is ready.

As far as the city is concerned, there will be no problem to connect the institutions with a spatial intention, as the distances around the city are not considerable. Besides, s mentioned in the theoretical background review, the metric distance has an unimportant role when it comes to spatial connection. The 5M is a good basis in order to develop this movement and include a medium and a smaller museum of spatially different venues, other than the big museums of the city located in the same neighborhood.

The idea of 5M was mentioned with positive feelings from the interviewees as it is a mean to strongly connect these 5 institutions, while there was a feeling that showed an effort made to this direction. A big problem of this activity though is the lack of human resources; this is why the movement is not so active lately.

The certain practices mentioned, that are used already can evolve, seek cooperation and be inspired for further activities, by the two proposed solutions in order to create a more unified outcome and to help each other and as a result be presented more inviting to the visitor.

As far as the new elements that were proposed and found during the interviews sessions, they showcase distinct limitations that should definitely be implemented in the proposed solutions in order to work more efficiently. While exploring which part of the museum was the best for the connection to appear, the interviewees gave the warning of depicting the dangers of the connectivity happening in the main exhibition part.

The negative response of the interviewees points very careful out an area where much attention should be given. Special research should be applied in this direction in order to have the desired results and not confuse the visitors. This is a very delicate selection and it should be taken under consideration. Few are the elements that should be selected in order not to confuse the visitor. A very careful connection scenario should run through the museums in order to help visitors

connect two or more venues but without being confused or taking a lot of information which will be impossible to handle.

Very positive were the outcomes of the part regarding the involvement of technology in the process. The results of the qualitative research had a very reasonable dynamic as far as the use of technologic means is concerned. There was also given a very positive feedback in the research process in proposing the use of social media platforms. As already mentioned the visitors react in a very confident way as far as the social media is concerned and as evidence comes the grow of engaged visitors (followers, fans, etc.), which is huge. The power of social media platforms and the instant interaction they propose is made clear when compared to the site version of each museum in the internet, where things are quieter.

As there are many complaints about the lack of human resources or a central institution to deal with this and run the project, there would be a highly evaluated concept to create a team that would be responsible for realizing this project, making people aware of it and possibly research more additional solutions for the future. This team's responsibility is recommended to be, to strategically point out the suggested plan and implement the solutions. The main guidelines that derive from this particular research paper are interaction and strategic planning in order to avoid the confusion of the visitors.

The financial issues that are mentioned and pointed out from the research are a fact that also has to be taken under consideration, as this is the actual fact of realizing or not the proposed solutions. This is not the time to extensive research this issue , but bearing in mind the solutions that have been proposed this could be handled through sponsorships, local authorities participation or 'friends of the museum' support.

Discussing the Concept

Taking under consideration the study of the field and the presentation in the literature review, the key findings of the research and the similar cases presentation

there will be proposed two solutions in order to connect the museums of Thessaloniki and enhance the visitors' experience.

There is the opportunity to develop the solutions separately or as a part of a strategic concept in order to solve this specific problem addressed above.

The first concept involves the use of the technology and the help of the smart-devices. It is an application that can be used by the visitor, while present in the exhibition space and connects visually exhibits from one museum with exhibits or even exhibitions of another local museum. The user will simply have to scan with his device a, commonly used in retail, QR code and information will immediately emerge on his device. A fact pointed out in the literature review is the following; in order to succeed a connection between various elements, it is most important and effective to connect smaller units of a system and in this way create a successful connection in a larger system.

There has to be an attentive and detailed consideration and evaluation of the facts being presented and the connections being suggested, in order to avoid user confusion. The forms of depicting museum and exhibition information are suggested to consist of pictures, photographs, graphs or even textual information. As the theoretical context proves visibility issues to have a great impact in spatial connection and strong user engagement, artificial cross-visibility can be created with technological means.

The second concept is an interactive platform that can be used in the entrance/ exit of each museum and will present all the museums and the connections between them in a brief and creative way. There can be used technological or more traditional means to realize this concept and merge connections to the visitor. The main characteristics of this concept are interaction and creativity in the means of building a positive experience to the visitor-user.

Both proposed solutions can act as environmental stimuli that will guide the visitors through a journey of all museums of the city. Additionally, both of them fulfill the main important facts introduced in the initial chapter of this study. What is introduced through space syntax methods, the visibility issue, is satisfied by using

visual material and offering to the visitor different exhibits with the help of technology visual encounter, and what is introduced through technology and cognitive issues, which enhances visitors' experience through interactive means.

All the facts that are pointed already out must be taken under serious consideration in order to enhance the whole experience. It is already specified the fact that there can be found different types of visitors and there should be taken under consideration a comprehensive solution in order to satisfy their needs. These experiences will possess the role of the connectors through the museums of one city.

In order to realize the concepts mentioned above, there have to be taken under consideration various facts and work on a general basis. A further suggestion would definitely be to introduce a team with the intention to work in close collaboration with an inter-museum administrative team in order to create and accomplish the final goal of creating the concepts by finding ways to fulfill the requirements.

Chapter 6- Conclusions

After an extensive research through the museums of the selected city of Thessaloniki, after interviewing experts from the museum field of the city and after investigating and studying similar cases from similar fields around the world and with the help of space syntax results and user experience methods, the final proposed concept was set in two directions.

The visitors of a museum in Thessaloniki can delicately be informed about the rest of the museums of the city, about their exhibitions and exhibits and current actions and events through a visitor's information point, with distinctive visual language, that could be installed in the entrance and exit of each museum, with the design interpretation being custom for smaller or bigger spaces.

While at the same time the visitor can be motivated to go through the journey of the museums of this city with the help of technology by a smart-device

application that could integrate visual information about exhibits and collections through all museums of the city and motivate the visitor to continue the tour.

The next steps in this process are creating a team with professionals of relevant fields, analyzing extensive the results of this research and identify the design parameters, define the design goals and conclude on the final project description for both suggestions. In order to be able to proceed and finalize the project the design guidelines should be defined and observed through the implementation phase to the final products.

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Chapter 8- Appendices

List of Museums of Thessaloniki

1. Macedonian Museum of Contemporary Art
2. State Museum of Contemporary Art
3. Teloglion Foundation of Art
4. Thessaloniki Cinema Museum
5. Thessaloniki Museum of Photography
6. Archeological Museum of Thessaloniki
7. Museum of Byzantine Culture
8. Folk life and Ethnological Museum of Thessaloniki
9. Jewish Museum of Thessaloniki
10. War Museum
11. Thessaloniki Olympic Museum
12. Ataturk Museum Thessaloniki
13. Science Center and Technology Museum "NOESIS"
14. Goulandris Natural History Museum
15. Waterworks Museum
16. Railway Museum

ΕΡΩΤΗΜΑΤΟΛΟΓΙΟ

A. Γενικές Ερωτήσεις

1. Για ποιον λόγο πιστεύετε ότι η τωρινή διάταξη δεν προάγει την σύνδεση των μουσείων και δεν ωθεί τους επισκέπτες να περιηγηθούν και σε άλλα μουσεία της πόλης;
2. Ποια ερεθίσματα θεωρείτε ότι θα μπορούσαν να χρησιμοποιηθούν, ώστε ο επισκέπτης να παρακινηθεί να μετακινηθεί από το περιβάλλον του ενός μουσείου στο περιβάλλον του άλλου μουσείου;
3. Τι αποτέλεσμα πιστεύετε ότι θα έχει η αλληλεπίδραση των επισκεπτών και η μετάδοση της εμπειρίας από την επίσκεψη τους στα διάφορα μουσεία όσον αφορά τη διασύνδεση των μουσείων; (πχ. Σχόλια στο site μουσείων-σε βιβλίο επισκεπτών-στα εκθέματα)
4. Η μεταφορά ή η διευκόλυνση της μεταφοράς/διαδρομής των επισκεπτών από το ένα μουσείο στο άλλο πως θα συνέβαλε στην κατεύθυνση αυτή;
5. Είναι το κοινό πλέον εξοικειωμένο σε βαθμό να αποζητάει ή προτιμάει τις νέες τεχνολογίες; Έχουν καλύτερη απόδοση έναντι του κλασσικού τρόπου παρουσίασης-πληροφόρησης; Προβάλλουν μια ανανεωμένη εικόνα των μουσείων που τις χρησιμοποιούν;
6. Ποιο σημείο/Ποια σημεία της διαδρομής του επισκέπτη στο μουσείο (είσοδος, εκθέσεις-εκθέματα, πωλητήριο, έξοδος) θεωρείτε ότι είναι το πιο κατάλληλο ή το πιο αποδοτικό για να γίνει η επικοινωνία των πληροφοριών που αφορούν τη διασύνδεση με άλλα μουσεία;

B. Η Κίνηση των 5 Μουσείων

1. Είχε ως στόχο την διασύνδεση των 5 μουσείων; Τι κίνητρα δόθηκαν στους επισκέπτες;
2. Για ποιο λόγο επιλέχθηκαν τα συγκεκριμένα 5 μουσεία;
3. Υπάρχει χώρος για να συνεργαστούν και άλλα μουσεία σε αυτήν τη βάση-πλατφόρμα;

